



**Fig. S4** Representative agarose gels depicting the fraction of DNA released (FDR) from the well into the gel for (a) UMUC-3 with E2F1 knockdown (KD), (b) miR-888-5p knockdown (ZIP-888), (c) APLF overexpression, and in (d) RT-4 with APLF knockdown (KD, clones A and C) versus their controls. Cells were irradiated with 0, 10, 20 or 30 Gy to construct the dose response (DR) curves. Repair kinetics (RK) was monitored at 0,5, 1, 2 or 4 hrs. The fraction from each sample was converted to DEQ and plotted as a function of time. DEQ values are extrapolated from the DR curves.